REMARKS

This Application has been carefully reviewed in light of the Office Action mailed July 6, 2006 ("*Office Action*"). Claims 1-28 are pending in the Application, and the Examiner rejects all pending claims. Applicant respectfully requests reconsideration and favorable action in this case.

I. 35 U.S.C. §102 Rejections:

The Examiner rejects Claims 1-28 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,809,133 issued Bartkowiak et al. ("*Bartkowiak*"). Applicant respectfully traverses this rejection and submits that *Bartkowiak* does not describe, expressly or inherently, each and every limitation of the claims.

Consider Applicant's independent Claim 1, which recites:

> A method for detecting a received signal comprising:
> determining a set of particles each modeling a potential signal generated by a transmitter;
> measuring a received signal from the transmitter;
> calculating a probability for each of the particles, the probability for a particle indicating likelihood of the potential signal modeled by the particle based upon the received signal;
> redistributing the particles within a space of potential signals that may be generated by the transmitter based upon the probabilities;
> selecting one of the particles based upon the distribution of the particles within the space of potential signals; and
> outputting the potential signal modeled by the selected particle.

Applicant respectfully submits that *Bartkowiak* fails to teach every element of this claim. Among other aspects, *Bartkowiak* fails to disclose: (1) determining a set of particles each modeling a potential signal, (2) calculating a probability for each of the particles, and (3) redistributing the particles within a space of potential signals that may be generated by the transmitter based upon the probabilities, as required by Claim 1.

First, Applicant respectfully submits that *Bartkowiak* fails to teach "determining a set of particles each modeling a potential signal," as required by Claim 1. As teaching these aspects, the *Office Action* points to *Bartkowiak*, column 6, lines 9-14. *Office Action*, p. 2. This portion of *Bartkowiak* states: "The codec receiver 104 preferably comprises all the necessary A/D, D/A, sampling and filtering circuitry for bi-directional analog digital interfacing. Once analog to digital conversion has been performed, digital data or digital samples are generated based upon the analog signal." *Bartkowiak*, col. 6, ll. 9-14. Applicant

respectfully submits that this fails to teach, or even suggest, modeling anything, much less determining a set of particles each modeling a potential signal, as required by Claim 1.

Second, Applicant respectfully submits that *Bartkowiak* fails to teach "calculating a probability for each of the particles," as required by Claim 1. As teaching these aspects, the *Office Action* points to *Bartkowiak*, column 6, lines 42-52. *Office Action*, p. 2. However, the cited portion of *Bartkowiak* fails to teach, or even suggest, a probability, much less calculating a probability. In fact, *Bartkowiak* only mentions the term "probability" (or any of its derivatives) once -- in the title of a cited reference. Accordingly, Applicant respectfully submits that *Bartkowiak* fails to teach "calculating a probability for each of the particles," as required by the claim.

Third, Applicant respectfully submits that *Bartkowiak* fails to teach "redistributing the particles within a space of potential signals that may be generated by the transmitter based upon the probabilities," as required by Claim 1. As teaching these claimed aspects, the *Office Action* points to *Bartkowiak*, column 12, lines 20-29. *Office Action*, p. 2. This portion of *Bartkowiak* states:

> In step 412 the DTMF detector determines if there is substantial energy build up in one or more of the second harmonic energy values of the possible tone frequencies. As discussed above, a real DTMF signal is the sum of two sinusoids and has two steep peaks in the frequency domain. Thus, a real DTMF signal does not have significant energy at second or higher harmonics. Speech on the other hand generally always has a significant amount of energy at the second and higher harmonics. This characteristic of speech makes it easier to distinguish speech from DTMF signal.

Bartkowiak, col. 12, ll. 20-29. Applicant respectfully submits that the cited portion of *Bartkowiak* fails to teach, or even suggest, redistributing anything, much less redistributing the particles within a space of potential signals that may be generated by the transmitter based upon the probabilities, as required by the claim.

Thus, *Bartkowiak* does not describe, expressly or inherently, each and every limitation of Claim 1. Independent Claims 10, 19, and 28 include limitations that, for substantially similar reasons, are not taught by *Bartkowiak*. Because *Bartkowiak* does not disclose, expressly or inherently, every element of independent Claims 1, 10, 19, and 28, Applicant respectfully requests reconsideration and allowance of Claims 1, 10, 19, and 28 and their respective dependent claims.

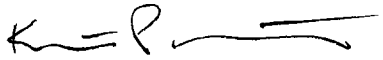
CONCLUSION

Applicant has made an earnest attempt to place the Application in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims. If the Examiner feels that a telephone conference or an interview would advance prosecution of the Application in any manner, the undersigned attorney for Applicant stands ready to conduct such a conference at the convenience of the Examiner.

Although no fees are believed to be currently due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of BAKER BOTTS L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.
Attorneys for Applicant



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